MINUTES
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
SITE TOUR
10 July 2002

Participants:

Bradley, John / United States Fish and Wildlife Service
Garrison, Kirsten / CH2M HILL
Hohenadl, Eike
Le, Si / Southwest Division, Naval Facilities Engineering Command (SWDIV)
Peoples, J.P.
Smith, Gregg / NAVWPNSTA Seal Beach
Tamashiro, Pei-Fen / NAVWPNSTA Seal Beach and Navy Co-chair
Veitmeier, Rudy
Vesely, Gene
Wong, Bryant/CH2M HILL

WELCOME

At 6:15 p.m., P. Tamashiro, Navy Co-chair and Base Installation Restoration Program (IRP) Coordinator, began the 2002 IRP Site Tour by welcoming the participants. A copy of the July 2002 Naval Weapons Station Seal Beach Newsletter was distributed to the participants that did not receive it, and P. Tamashiro indicated that the newsletter provided additional information about the IRP sites, including the sites that would be visited on the site tour that evening.

Participants were encouraged to direct any questions regarding the IRP sites or any other environmental questions to P. Tamashiro. It was noted that contact information for P. Tamashiro was provided in the newsletter previously handed out to the participants. P. Tamashiro also announced that she was the contact person if anyone was interested in joining the RAB.

P. Tamashiro then introduced B. Wong, CH2M HILL Project Manager who would be leading the 2002 IRP Site Tour. A map illustrating the locations of IR Sites 7, 74, 22, 5, 40, 73, SWMU 24, and 70, was provided as a handout to the participants of the site tour. B. Wong indicated that participants should bring along a jacket for warmth, as it will get chilly by the end of the two-hour tour. He also requested that the IRP Site Tour participants stay together during the tour. While the sites are not considered acutely toxic, some contamination may be present. B. Wong has worked on the IRP at NAVWPNSTA Seal Beach since 1990 and is familiar with the sites and past and ongoing activities. He encouraged participants to ask questions during the site tour.

The order of the sites visited are as listed below. Questions and answers discussed during the site tour are summarized below.

SITE TOUR

Site 7 – Station Landfill

Question: Is this dirt road the boundary between the NAVWPNSTA Seal Beach and the Seal Beach National Wildlife Refuge (NWR)?

Answer: Yes.

Question: How deep will Area 5 be excavated?

Answer: The Navy conducted a geophysical survey that determined the debris within the trenches at Area 5 averages about 6 feet deep. Excavation plans are to dig 6 feet; however, the actual excavation depth will depend on the depth of debris actually buried.

Question: Will excavation occur right at the edge of Perimeter Pond?

Answer: Yes, and slightly inland. There are two trenches – one exposed trench along the eastern shoreline of Perimeter Pond and a buried trench inland of the exposed trench. Exposed debris will be removed closest to Perimeter Pond and the buried trench located slightly inland will both be excavated.

Question: Will a protective barrier be placed between the digging activities and Perimeter Pond?

Answer: Excavation activities will be conducted first at the buried trench, located slightly inland, and backfilled with clean material. Then excavation at the edge of Perimeter Pond will be conducted. This approach will also involve minimizing silt dispersal to reduce impact to the water quality of Perimeter Pond.

Question Are the metal objects located above ground in the eastern portion of Site 7 used for venting methane?

Answer No, these are groundwater monitoring wells used to sample the groundwater and monitor the water levels at Site 7. The metal posts surrounding the monitoring wells are bollards to protect the wells from being struck by vehicles and other equipment used during monitoring.

Question Is there any detectable level of methane in the landfill?

Answer Methane levels are below the lower explosive level and considered low.

Question Is this due to the age of the landfill?

Answer Yes. It is 25 to 50 years old and the site conditions (tidal influence, groundwater movement, and types of soils) enhanced the breakdown of organic materials buried in the landfill during this period.

Question Was this area operated like a typical solid waste landfill?

Answer Yes, it was operated as a municipal landfill. Trenches were excavated, filled with trash, and covered.

It is also general public knowledge that the landfill was open to the public for a period of time many years ago.

Question Has the age of the landfill and knowledge of current conditions helped the Navy to understand the degradation process?

Answer Yes, it explains the low levels of methane and other gases present at Site 7 and why contamination levels are so much lower than the Navy anticipated.

Question To clarify my previous question, what I meant to ask was do the studies at Site 7 help the Navy to know how degradation works at other sites at NAVWPNSTA Seal Beach?

Answer Yes, it has and, likewise, experience with other landfills at other bases and locations help the Navy understand what is occurring here at Site 7.

Question Before Site 7 was used as a landfill, what did this area look like? Was it tidally influenced? Did this dirt road exist?

Answer Old photos show that the area west of the road, which is now part of the NWR, looked very different (this was before the area was filled). The area to the east, however, looks very much the same. It has always been relatively dry.

Site 74 – Old Skeet Range

No questions were posed concerning Site 74.

Site 22 – Oil Island

Pat Gorski of BreitBurn Energy met the RAB Tour at Site 22 and gave an informal presentation of the facility history. He also provided answers to the following questions posed during and after the presentation:

Question: You (Pat Gorski) mentioned that there are currently 9 wells functioning at Oil Island. However, I thought Bryant Wong indicated that there were 19 well that are currently operational?

Answer: There are currently 19 wells that have the capability to operate, however today there are 12 operating (several are cycling wells).

Question: What is being burned off when I occasionally see a flame burning on Oil Island?

Answer: This is an emergency natural gas flare that Oil Island is permitted by the air quality district to be used. If the natural gas line (leading off the island) is ever shut down, we can use this as a relief valve to burn off residual natural gas.

Question: Are the wells that are drilled at Oil Island directional or were they drilled straight down?

Answer: Some wells were directionally drilled. Wells that are directional drilled will have a deviation of approximately a 10 to 30 degree angle. None of the wells

are drilled horizontally. Wells extend 4,000 to 8,000 feet from Oil Island in various directions.

Question: How old are the drill lines and casings that extend into the NWR?

Answer: The integrity of the casings is closely monitored by the California Division of Oil & Gas. The casings are checked for leaks.

Question: How long will oil production at Oil Island be economically viable?

Answer: There is no way to tell. The wells are on this location have been consistently productive.

Question: How long does the lease run here at Oil Island?

Answer: The lease began in 1954 and extends for the life of the field. There is no set data to calculate the life of the field. The price of oil is also factored in, since the operation will only continue if the production is economically viable.

Question: What is the price of oil per barrel?

Answer: About $26 per barrel.

Question: What is the capacity of Oil Island to hold a spill?

Answer: Oil Island has the capacity to store 90,000 barrels of liquid. The Oil Island facilities also have the capability to pump liquids back into the system and inject it back underground into the formation, if needed.

Question: What is the estimated production at Oil Island in terms of barrels of oil per hour?

Answer: Oil Island produces approximately 120 barrels of oil per day.

Question: I am trying to determine how much flammable liquid is kept at Oil Island at any given time, given the danger of explosion of flammable materials.

Answer: Oil is shipped out of Oil Island every 2 to 3 days. At any given time, there are 300 to 400 barrels onsite. The maximum oil storage would be 400 to 500 barrels. The oil storage at Oil Island is not that large and it requires frequent shipment off site.

Comment: So above surface storage of oil at Oil Island accounts for at most 400 to 500 barrels. I'm just concerned with how much flammable liquid is present if a fire occurred.

<u>Site 5 – Clean Fill Disposal</u>

Question: Is this the water level at Site 5 during low tide?

Answer: No, I believe it's closer to high tide. However, at full high tide, all the pickleweed and cordgrass would not be visible.

Question: So the area excavated here at Site 5 will be left to return to its original wetland state without any additional work?

Answer: Yes, Mother Nature will take over.

Question: The vegetation here at Site 5 is composed of pickleweed and cordgrass?

Answer: Yes, these are species that have adapted to frequent inundation due to tidal flooding.

Site 40 – Concrete Pit/Gravel Area

Question: Was carbon tet (carbon tetrachloride) used here?

Answer: I don't believe so, PCE is the primary source of contamination at Site 40. Over the years, perchloroethene (PCE) and other chlorinated solvents have been replaced with more environmentally friendly solvents. Carbon tet is considered to be less environmentally friendly than PCE and was probably never used here by the Navy. There have not been any detections of carbon tet in the groundwater or soils sampled at Site 40.

Question: Will the presentation on potential remedies for groundwater contamination at Site 40 (scheduled for September 2002) address the planning stages of the remedy approaches or will it be a review of the activities conducted thus far?

Answer: The RAB presentation will review the in-situ biodegradation using lactate enhancement pilot testing program for Site 40 and present the results. In addition, future activities (i.e., bioaugmentation and cometabolic oxidation) that could be added to future pilot testing at Site 40 will be discussed.

Site 73 – Water Tower Area

Question: Will the site be left as-is after excavation?

Answer: The site will be restored to original grade.

SWMU 24 – Demilitarization Facility

Question: Will trucks be used for soil removal at SWMU 24?

Answer: Yes. The site is not large and will not require rail road cars to haul contaminated soil off-site. Excavation will probably occur up to about an average of 2 feet deep.

Site 70 – Research, Testing, and Evaluation Area

Question: Does the contaminated groundwater beneath Site 70 involve the drinking water?

Answer: No, there are clay aquitards that separate the shallow groundwater and the deep drinking water sources located hundreds of feet below ground. The Orange County Water District has participated in the review of studies conducted at Site 70 to ensure that the deep drinking water aquifer is not affected.

Question: Is there a member of the Orange County Water District on the RAB?

Answer: No, the Orange County Water District receives and reviews technical documents, but they do not regularly attend RAB meetings.

Question: Where is the groundwater plume in relation to the NWR?

Answer: The groundwater plume ends at Site 1, which is located at the northern tip of the NWR boundary. The contamination exists several hundred feet beneath the NWR however, so no contact with surface waters of the NWR occurs.

Question: You have determined groundwater contamination at Site 70. Has any testing for other contaminants been conducted? What about soil contaminants?

Answer: The soil has been tested and no contaminants were detected. Contamination was found in the shallow (about 20 feet below ground surface) and deeper groundwater.

Question: Will the pump and treat program at Site 70 be conducted for 50 years?

Answer: A combination of hydraulic containment and pump and treat will be conducted until the contamination reaches a level that is acceptable and agreed upon by all parties.

Question: Pilot testing for chemical oxidation was conducted for Site 70. Is this still the planned approach for contamination cleanup?

Answer: Yes, it is still a viable approach, however, other, less aggressive chemicals will be considered. The original plan to use Fenton's reagent is considered very aggressive. It is likely, however, that these less aggressive approaches will take more time and may be less effective.

Question: Is there a safety issue with the Geo-Cleanse approach?

Answer: Yes. There are underlying utilities and communication wires that we would not want to adversely affect while implementing the technology.

The Record of Decision will be reviewed before implementing the remediation design at Site 70. Also an extensive study and design phase must be completed before implementation.

ADJOURNMENT

P. Tamashiro thanked the participants for attending the 2002 IRP Site Tour. G. Smith, the Public Affairs Officer for NAVWPNSTA Seal Beach was introduced and participants were encouraged to forward any questions regarding the IRP or site tour to P. Tamashiro or G. Smith.

The 2002 IRP Site Tour ended at 8:15 p.m.

Note: This is a meeting summary, not an actual transcript.